DOCUMENT RESUME

ED 467 045 PS 030 519

AUTHOR	Raver, C. Cybele; Knitzer, Jane
TITLE	Ready To Enter: What Research Tells Policymakers about Strategies To Promote Social and Emotional School Readiness among Three- and Four-Year-Old Children. Promoting the Emotional Well-Being of Children and Families Policy Paper.
INSTITUTION	Columbia Univ., New York, NY. National Center for Children in Poverty.
SPONS AGENCY	Casey Family Programs, Seattle, WA.; Grant (W.T.) Foundation, New York, NY.
REPORT NO	NCCP-3
PUB DATE	2002-00-00
NOTE	29p.; Funded by the Marguerite Casey Foundation (formerly the Casey Family Programs).
AVAILABLE FROM	National Center for Children in Poverty, Columbia University, 154 Haven Avenue, New York, NY 10032 ($5). Tel: 212-304-7100; Fax: 212-544-4200; e-mail: nccp@columbia.edu; Web site: http:/ /www.nccp.org.
PUB TYPE	Information Analyses (070) -- Reports - Evaluative (142)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS
DESCRIPTORS	Adjustment (to Environment); *At Risk Persons; Child Care; Child Caregivers; Early Childhood Education; *Early Intervention; Emotional Adjustment; Emotional Problems; Incidence; Mental Health; *Preschool Children; Preschool Education; Preschool Teachers; *Public Policy; Research Needs; School Readiness; Social Adjustment; Teacher Role; *Well Being
IDENTIFIERS	Risk Factors

ABSTRACT

This policy paper focuses on what emerging research tells policymakers about why it is so important to intervene to help young children at risk for poor social, emotional, and behavioral development, and what kinds of research-based interventions seem most effective. The paper addresses the relationship between early academic learning and emotional development, the prevalence of emotional problems in preschool-aged children and young children who are exposed to multiple family and environmental risk factors, and the role of teachers and child care providers in reducing or exacerbating problems. Also explored is the emerging but still limited research on the efficacy of preventive and early interventions explicitly targeted to address the social, emotional, and behavioral difficulties of young children, particularly in the context of early care and education settings. The paper concludes with recommendations for policymakers and researchers. (Contains 78 endnotes.) (KB)

Reproductions supplied by EDRS are the best that can be made
from the original document.

Promoting the Emotional Well-Being of Children and Families

POLICY PAPER #3

ED 467 045

Ready to Enter

What Research Tells Policymakers About Strategies to Promote Social and Emotional School Readiness Among Three- and Four-Year-Old Children

PS 030519

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
Elizabeth Siecke
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
2B

NATIONAL CENTER FOR CHILDREN IN POVERTY
MAILMAN SCHOOL OF PUBLIC HEALTH, COLUMBIA UNIVERSITY

BEST COPY AVAILABLE

PROMOTING THE EMOTIONAL WELL-BEING OF CHILDREN AND FAMILIES

This document is part of a policy paper publication series that reflects a larger effort the National Center for Children in Poverty (NCCP) is undertaking with generous support from the Casey Family Programs to help the most vulnerable families. It continues and builds on NCCP's earlier work to document effective strategies and highlight policy opportunities and challenges to promote the emotional health of young children and families. The series is intended to help policymakers, community leaders, and advocates take action to ensure the healthy development of children and their families.

This policy paper focuses on what emerging research tells policymakers about why it is so important to intervene to help young children at risk for poor social, emotional, and behavioral development and what kinds of research-based interventions seem most effective. It addresses the relationship between early academic learning and emotional development; the prevalence of emotional problems in preschool-aged young children and young children who are exposed to multiple family and environmental risk factors; and the emerging but still limited research on the efficacy of preventive and early interventions explicitly targeted to address the social, emotional, and behavioral difficulties of young children, particularly in the context of early care and education settings.

PROMOTING THE EMOTIONAL WELL-BEING OF CHILDREN AND FAMILIES

Ready to Enter

What Research Tells Policymakers About Strategies to Promote Social and Emotional School Readiness Among Three- and Four-Year-Old Children

C. Cybele Raver
Irving B. Harris Graduate School of Public Policy Studies
University of Chicago

Jane Knitzer
National Center for Children in Poverty
Columbia University Mailman School of Public Health

NATIONAL CENTER FOR CHILDREN IN POVERTY
MAILMAN SCHOOL OF PUBLIC HEALTH, COLUMBIA UNIVERSITY

The Authors

C. Cybele Raver, Ph.D. is an associate professor in the Irving B. Harris Graduate School of Public Policy Studies and a faculty affiliate at the Center for Human Potential and Public Policy, University of Chicago. In 1999–2001, Dr. Raver was a visiting research fellow at NCCP where she began this research synthesis.

Jane Knitzer, Ed.D., is deputy director of the National Center for Children in Poverty. She also directs its research on vulnerable families experiencing multiple stresses and on children's mental health.

Acknowledgments

The authors gratefully acknowledge the support of the Marguerite Casey Foundation (formerly the Casey Family Programs) for making this policy paper as well as others in the series possible. Their grasp of the importance of promoting understanding about the role that social and emotional development has on school readiness and their commitment through the support of NCCP's work in this area, as well as their funding for the national Starting Early Smart initiative, sets the stage for new research, policy, and action to promote the emotional well-being of young children and their families. Support for this research also came from a Faculty Scholars Award to Dr. Raver from the William T. Grant Foundation.

The authors are also grateful to the researchers who talked with us informally and who shared early as well as published findings, and especially to those who reviewed previous drafts of the document: David H. Arnold, Steven Forness, Herbert Ginsburg, Carolyn Webster-Stratton, and Hirokazu Yoshikawa. An additional, related review written by Dr. Raver will be published in *Social Policy Report* in 2002, issued by the Society for Research in Child Development. Finally, we want to thank Gina Rhodes, who copyedited the manuscript and the NCCP production team, especially Carole Oshinsky, Kate Szumanski, and Telly Valdellon.

Ready to Enter: What Research Tells Policymakers About Strategies to Promote Social and Emotional School Readiness Among Three- and Four-Year-Olds

Copyright © 2002 by the National Center for Children in Poverty

Copies of this publication are available prepaid for $5.00 from the National Center for Children in Poverty, 154 Haven Avenue, New York, NY 10032; Tel: (212) 304-7100; Fax: (212) 544-4200 or 544-4201; E-mail: nccp@columbia.edu; Web site: www.nccp.org. Checks should be made payable to Columbia University.

Executive Summary

A recent and compelling study entitled *Neurons to Neighborhoods*, conducted by the Board on Children, Youth, and Families of the Institute of Medicine, calls attention to the importance of early emotional development in young children. Based on a careful review of neuroscience and developmental science, it highlights compelling evidence that a child's earliest experiences and relationships set the stage for how a child manages feelings and impulses, and relates to others. It also highlights emerging and perhaps surprising evidence that emotional development and academic learning are far more closely intertwined in the early years than has been previously understood. This policy paper focuses on what emerging research tells policymakers about why it is so important to intervene to help young children at risk of poor social, emotional, and behavioral development and what kinds of research-based interventions seem most effective. It addresses:

- the relationship between early academic learning and emotional development;
- the prevalence of emotional problems in preschool-aged young children and young children who are exposed to multiple family and environmental risk factors;
- the role of teachers and child care providers in reducing or exacerbating problems; and
- the emerging but still limited research on the efficacy of preventive and early interventions explicitly targeted to address the social, emotional, and behavioral difficulties of young children, particularly in the context of early care and education settings.

What Research Tells Us About How Emotions and Early Academic Learning Are Linked

The Take-Home Research Message

- Young children who act in anti-social ways participate less in classroom activities and are less likely to be accepted by classmates and teachers. Even in preschool, teachers provide such children with less instruction and less positive feedback. These children like school less, learn less, and attend less.
- Young children who show signs of anti-social or aggressive behavior are more likely to do poorly on academic tasks and to be held back in the early years. In later childhood and adolescence, they are at greater risk of dropping out and engaging in delinquent acts.
- Across a range of studies, the emotional, social, and behavioral competence of young children (such as higher levels of self-control and lower levels of acting out) predict their academic performance in first grade, over and above their cognitive skills and family backgrounds.

The Take-Home Policy Message

- Efforts to get young children who are at risk of early school failure on a positive school trajectory before negative attitudes and behaviors escalate is likely to pay off both in the short and long term.

What Research Tells Us About the Prevalence of Social, Emotional, and Behavioral Problems in Young Children

The Take-Home Research Message

- The majority of low-income young children succeed in making the transition to school.
- The prevalence of problematic behaviors in young children is about 10 percent. Studies focused on low-income children in kindergarten suggest a prevalence rate that is considerably higher—27 percent. Observational data on preschoolers suggest that between 4 and 6 percent have serious emotional and behavioral disorders, and between 16 and 30 percent pose on-going problems to classroom teachers.
- In general, the more chronic the economic, social, and psychological stressors that young children face, the greater the likelihood of poor social, emotional, and cognitive outcomes. For this reason, these stressors have been identified as "risks." Over 32 percent of all young children are affected by one risk factor such as low income, low maternal education, or single-parent status, and 16 percent are in families with two or more socio-demographic risks.

The Take-Home Policy Message

- Teachers and child care providers are likely to find that, while some children are doing very well despite exposure to these risks, other children are struggling with a range of emotional and behavioral difficulties that make the tasks of teaching and caregiving very tough. Teachers and child care providers need help in promoting greater social skills in these children and reducing challenging behavior in the classroom both to help individual children and to facilitate a positive learning climate. Sometimes, the children and the families also need access to more specialized help.

What Research Tells Us About the Role of Teachers and Child Care Providers

The Take-Home Research Message

- Teachers in preschool classrooms are coping with a substantial number of young children who struggle with emotional and behavioral problems that pose a risk for early school success.

- How teachers interact with young children affects the children's social and emotional outcomes negatively or positively.

The Take-Home Policy Message

- The first line of defense in promoting school readiness across all developmental domains (including social, emotional, cognitive, and physical) is to ensure that all children whose parents request it have access to quality early care and learning experiences, marked by classrooms with warm teachers and a predictable, stimulating atmosphere.

- It is critical to provide early childhood teachers with training and access to help in dealing with the numbers of children experiencing or at risk for emotional and behavioral problems, even in high-quality settings, but especially where quality is problematic.

What Research Tells Us About Classroom-Linked Interventions that Can Help

The Take-Home Research Message

- Preliminary research findings on the impact of social skills curricula targeted to all preschool children in a classroom are promising but involve very limited samples.

- For preschool-aged children at higher risk, research supports the use of interventions that target both parents and caregivers/teachers (and may also involve social skills curricula targeted to the children). New research combining behavioral strategies with reading and other more academically oriented interventions are also being evaluated.

- On-site mental health consultation is the dominant strategy emerging across the country. Yet research evaluating this strategy is limited. However, early findings from one national demonstration effort are promising, showing consistent cross-site effects of improved parenting and better child outcomes.

The Take-Home Policy Message

- The urgent need to help young children succeed in school and the numbers of young children who are at risk for early school failure linked to emotional and behavioral difficulties point to the importance of implementing effective interventions earlier rather than later. Although still limited, emerging patterns from intervention research can help guide policymakers in developing these earlier intervention strategies.

Conclusions and Recommendations

This policy paper makes it clear that although there is still much more to learn about the effectiveness of preschool-aged interventions, the scientific evidence of the need for early intervention is compelling. Further, the intervention research that does exist is beginning to tell a sufficiently coherent story to enable policymakers to respond. Below are recommendations for policymakers and researchers to build on the knowledge base highlighted here.

Policymakers should:

- Invest in and evaluate interventions that improve the quality of early childhood classrooms and that provide teachers with the resources and training they need to maintain emotionally positive and cognitively enriching classrooms.
- Pay special attention to classroom-based strategies to promote social and emotional competence that combine child-focused strategies with strategies targeted to parents, teachers, and other caregivers.
- Consider interventions that simultaneously address cognitive, social, and emotional issues, recognizing the links between social and emotional development and successful academic learning, including early literacy.
- Invest in mental health and child development consultants who can help the children, the families, and the teachers implement evidence-based preventive and early intervention strategies related to social and emotional competence as well as enhance classroom quality and effective management practices.
- Focus special attention on children and families experiencing cumulative and multiple stressors.
- Invest at the state and community levels in strategies to ensure the timely dissemination of "research to practice" knowledge about how to promote social and emotional resilience in young children.

This policy paper makes it clear that although there is still much more to learn about the effectiveness of preschool-aged interventions, the scientific evidence of the need for early intervention is compelling.

Researchers should:

- Design research to fill in gaps in the understanding of how quality child care and early educational practices affect the social and emotional development of young children.
- Pay more attention to issues of "treatment fidelity"—ask if the intervention was carried out as planned, and how this affects the results.
- Conduct multi-site investigations of promising approaches that now primarily involve relatively small samples in one or two sites.
- Conduct research on the cost-benefit ratio and tradeoffs of investing in different types of interventions.
- Convene networks of researchers in early childhood mental health to promote the use of shared measures and methodologies to maximize the learning from future research.

This policy paper is intended to serve as a call to action for researchers and policymakers. The urgency of the need, the growing knowledge base, coupled with the stake society has in addressing the social and emotional development of young children in a smart way, compels greater attention to this critical domain of development in the context of school readiness.

Introduction

A recent and compelling study entitled *Neurons to Neighborhoods*, conducted by the Board on Children, Youth, and Families of the Institute of Medicine, calls attention to the importance of early emotional development in young children.[1] Based on a careful review of neuroscience and developmental research, it highlights compelling evidence that a child's earliest experiences and relationships set the stage for how a child manages feelings and impulses, and relates to others. It also highlights emerging and perhaps surprising evidence that emotional development and academic learning are far more closely intertwined in the early years than has been previously understood. What research tells us is that, for some young children, emotional and behavioral problems serve as a kind of red flag. Without help, evidence suggests that these emotional and behavioral difficulties may stabilize or escalate and negatively affect early school performance. In turn, early school performance is predictive of later school outcomes.[2] Thus, paying attention to the emotional status of young children has important implications for policy and practice strategies designed to promote school readiness.

Elsewhere, the National Center for Children in Poverty (NCCP) and others have highlighted emerging policy efforts to promote social, emotional, and behavioral competence in young children, especially those most at risk.[3] This issue brief focuses on what emerging research tells policymakers about why it is so important to intervene to help young children at risk of poor social, emotional, and behavioral development and what kinds of research-based interventions seem most effective. Because there has been so much recent attention to the importance of preventive and early intervention in the infant and toddler years,[4] the emphasis of this report is on the years between ages three and five. This is when many of the problems become unmistakably visible. Also, there has been relatively little synthesis of research about this age group for policymakers, particularly syntheses that address interventions explicitly designed to address social and emotional issues.

What research tells us is that, for some young children, emotional and behavioral problems serve as a kind of red flag. Without help, evidence suggests that these emotional and behavioral difficulties may stabilize or escalate and negatively affect early school performance.

This policy paper is particularly timely. Although there is widespread agreement that success in the early school years is critical to later school achievement, there is controversy about how best to help young children at risk of early school failure.[5] Increasingly, scholars argue that school success is linked not just to cognitive competencies, but also to the social and emotional competencies that complement more academic learning.[6] This document takes this broader perspective. It highlights research findings about:

- the relationship between early academic learning and emotional development;
- the prevalence of emotional problems in preschool-aged young children and young children who are exposed to multiple family and environmental risk factors;
- the role of teachers and child care providers in reducing or exacerbating problems; and
- the emerging, but still limited research on the efficacy of preventive and early interventions *explicitly* targeted to address the social, emotional, and behavioral difficulties of young children, particularly in the context of early care and education settings.

The policy paper is based primarily on a synthesis of the published literature, although it also includes preliminary findings from intervention studies that are still in progress. The focus is on what can be done in the context of early care and learning programs. The brief does not address issues of screening, diagnosis, or more specialized clinical treatment strategies for young children.

What Research Tells Us About How Emotions and Early Academic Learning Are Linked

The Take-Home Messages

The Research Message

- Young children who act in anti-social ways participate less in classroom activities and are less likely to be accepted by classmates and teachers. Even in preschool, teachers provide such children with less instruction and less positive feedback. These children like school less, learn less, and attend less.
- Young children who show signs of anti-social or aggressive behavior are more likely to do poorly on academic tasks and to be held back in the early years. In later childhood and adolescence, they are at greater risk of dropping out and engaging in delinquent acts.
- Across a range of studies, the emotional, social, and behavioral competence of young children—such as higher levels of self-control and lower levels of acting out—predict their academic performance in first grade, over and above their cognitive skills and family backgrounds.

The Policy Message

- Efforts to get young children who are at risk of early school failure on a positive school trajectory before negative attitudes and behaviors escalate is likely to pay off both in the short and long term.

Research Findings

Researchers have examined links between emotional adjustment and academic success in young children primarily from two perspectives. First, they have identified skills related to social and emotional competence (see box) and related them to the academic performance of young children with varying levels of such skills. Second, they have studied children with behavioral problems and examined how those problems affect academic success. The researchers found that, across a range of studies, emotional, social and behavioral competence (marked by more cooperation and self-control, and less aggressive behavior) in early childhood predict children's academic performance as early as the first grade. Recent studies find that the social and emotional adjustment of young children make a difference in predicting their early academic achievement even after varying levels of family resources and cognitive skills have been taken into account.[7] Children's ability to regulate their emotions, impulses, and attention also play a significant role in predicting whether they will be held back to repeat kindergarten, even after statistically controlling for their memory, language, and motor skills.[8]

SOCIAL, EMOTIONAL, AND BEHAVIORAL SKILLS THAT PROMOTE SCHOOL READINESS*

Young children are more likely to succeed in the transition to school if they can:

- Accurately identify emotions in themselves and others. (Children who cannot do this persistently misinterpret social situations and routinely perceive the motivations of others as hostile.)
- Relate to teachers and peers in positive ways. (Children who lack what are often called "prosocial skills" are likely to have few friends and negative relationships with teachers.)
- Manage feelings of anger, frustration, and distress when faced with emotionally charged situations (e.g. another child takes a favorite toy).
- Enjoy academic learning and approach it enthusiastically.
- Work attentively, independently, and cooperatively in a structured classroom environment.

Young children are less likely to succeed in the transition to school if they:

- Engage in frequent fighting, hitting, shouting, or other aggressive behaviors.
- Are unable to control impulsive behavior.
- Are unable to pay attention to tasks or follow directions.
- Engage in oppositional, noncompliant, even defiant behavior.
- Are unable to cooperate with others.
- Constantly seek attention from peers or teachers.
- Ignore peers or teachers.

* Eisenberg, N. & Fabes, R. (1992). Emotion, regulation, and the development of social competence. In M. S. Clark (Ed.). *Emotion and social behavior: A review of personality and social psychology.* Newbury Park, CA: Sage Publications, pp. 119–150. Frey, K.; Hirschstein, M. K.; & Guzzo, B. A. (2000). Second step: Preventing aggression by promoting social competence. Journal of Emotional and Behavioral Disorders, 8(2), pp. 102–113. Stipek, D. J. & Ryan, R. H. (1997). Economically disadvantaged preschoolers: Ready to learn but further to go. Developmental Psychology, 33(4), pp. 711–723. Raver, C. C. & Zigler, E. F. (1997). Social competence: An untapped dimension in evaluating Head Start's success. Early Childhood Research Quarterly, 12(4), pp. 363–385.

BEST COPY AVAILABLE

Researchers are also beginning to document the processes by which children lacking in emotional skills or showing behavioral problems lose out in their preschool and early school learning environments. Children who act in anti-social ways are less likely to be accepted by classmates and teachers.[9] They also participate less in classrooms and do worse in school than their more emotionally positive, prosocial counterparts. Because they are tough to teach, teachers provide them with less instruction and less positive feedback, even in preschool.[10] New research also shows that teachers are less likely to recognize cognitive competencies in young children whose behavior they perceive as negative.[11] This causes the children to lose out on the positive reinforcement that they might otherwise receive from others. Furthermore, emotionally negative, angry children lose opportunities to learn from their classmates as children gather to work together and help each other in the classroom.[12] The end result, not surprisingly, is that children who are disliked by teachers and classmates grow to like school less, feel less enthusiasm for learning, and avoid school more often, showing lower rates of school attendance.[13]

For some young children, cognitive difficulties may trigger the emergence or escalation of behavioral problems as well as vice versa.[14] Difficulty in reading, for example, may spur children to act out, and children who act out are likely to be less attentive and less likely to receive instruction from teachers.[15] It should also be noted that some research links low social skills with poorer language development, which is also strongly related to success in school. Thus, in a recent study focused on three-year-old children in Head Start screened for early indicators of behavioral problems and communication deficits, children with low social skills were more likely to have low language scores than were their peers with average skills.[16] What does this mean for school readiness? While social and emotional skills should be an important focus of early intervention, it is also clear that there is still much to be learned about the ways that the language, emotional, and behavioral skills of young children work together to support or hinder their early school success.

What Research Tells Us About the Prevalence of Social, Emotional, and Behavioral Problems in Young Children

The Take-Home Messages

The Research Message

- The majority of low-income young children succeed in making the transition to school.
- The prevalence of problematic behaviors in young children is about 10 percent. Studies focused on low-income children in kindergarten suggest a prevalence rate that is considerably higher—27 percent. Observational data on preschoolers suggest that between 4 and 6 percent have serious emotional and behavioral disorders, and between 16 and 30 percent pose on-going problems to classroom teachers.
- In general, the more chronic the economic, social, and psychological stressors that young children face, the greater the likelihood of poor social, emotional, and cognitive outcomes. For this reason, these stressors have been identified as "risks." Over 32 percent of all young children are affected by one risk factor such as low income, low maternal education, or single-parent status, and 16 percent are in families with two or more socio-demographic risks.

The Policy Message

- Teachers and child care providers are likely to find that, while some children are doing very well despite exposure to these risks, other children are struggling with a range of emotional and behavioral difficulties that make the tasks of teaching and caregiving very tough. Teachers and child care providers need help in promoting greater social skills in these children and reducing challenging behavior in the classroom both to help individual children and to facilitate a positive learning climate. Sometimes, the children and the families also need access to more specialized help.

Research Findings

Four million young children enter kindergarten each year. Most of these children, regardless of income or race, bring to the transition to school the kinds of social, emotional, language, and cognitive skills that they need.[17] But a significant group is at risk for early school failure because they lack the social, emotional, and behavioral skills needed to succeed in school, sometimes along with poor language and cognitive skills as well.[18] Exactly what percent of children need help—and how intensive the help needed—has critical implications for resource allocation and policy development as well as practice. Firm estimates of the numbers of young children who exhibit challenging behaviors and lack social skills are very difficult to come by. The research focuses on three questions that are not always clearly separated.

- What percentage of young children show signs of problematic behavior (typically as determined by caregivers, parents, or other observers)?
- What percentage of young children show clinically significant levels of impairment?
- What percentage of young children are *at risk* for more serious emotional and behavioral problems?

Responses to these questions vary depending upon whether the studies focus only on children showing signs of serious emotional and behavioral disorder, on only low-income children, or on all young children. Estimates are also affected by the methods and measures used; whether reports are from the teacher, the parent, or both, and whether they involve clinical observations or formal protocols may all result in varying estimates. For example, research indicates that teacher reports of behavioral problems vary depending upon whether the child and the teacher are ethnically similar or different and upon the percentage of minority children in the classroom.[19] Identification rates also vary depending upon the combination of instruments used and whether the focus is only on symptoms or on strengths and adaptive behavior. For example, in one study identification rates varied from 1 percent to 28 percent depending upon the instruments.[20] This suggests, and other research has confirmed, that the risk of racial, cultural, and gender stereotyping and bias is very real.[21] Further, even at their best, prevalence estimates only provide a snapshot of children's successes and struggles at one point in time. With these caveats, below are answers to the prevalence questions, based on current research.

What percentage of young children show signs of problematic behavior?

The Early Childhood Longitudinal Survey (ECLS), which involves a nationally representative sample of over 22,000 children in kindergarten, tells a national story. Based on information from a short list of behavioral problems (that do not meet clinical levels of specificity), approximately 10 percent of the children enrolled in an average kindergarten classroom engage often or very often in arguments or fights, or easily become angry. ECLS data also suggest that exposure to multiple poverty-related risks increases the odds that children will demonstrate more behavioral problems and less social and emotional competence.[22]

Studies focused primarily on economically disadvantaged children underscore the seriousness of their social and emotional needs. For example, in one recent study, Head Start teachers reported that about 40 percent of preschoolers exhibit at least one disruptive and unsafe behavior each day, such as kicking, hitting, and threatening, with 10 percent of their children daily exhibiting six or more antisocial, aggressive behaviors.[23] Another study found that preschoolers were observed to engage in an average of 32 instances of misbehavior (including hitting, grabbing, pushing, verbal aggression, and ignoring teacher requests) within a given 10-minute interval of time.[24] A survey of child care providers in 10 Chicago centers found 32 percent of the children (including toddlers) had behavioral problems.[25] A review of a series of community-based Head Start prevalence studies found considerably more variation in problem behavior, ranging from 5 to 33 percent.[26]

What percentage of young children show clinically significant levels of impairment?

Prevalence estimates of young children with clinically significant levels of impairment vary depending upon the diagnosis. For example, estimates of clinical levels

of oppositional and defiant behavior and early onset conduct disorder in young children range from 2 to 7 percent.[27] Similarly, estimates of serious emotional disorders in young children range from 4 to 10 percent.[28] For instance, researchers conducting careful assessments of Head Start children have estimated that between 6 and 10 percent met the criteria for emotional and behavioral disabilities.[29] Parents of former Head Start children now in kindergarten reported that 7 percent of children who had been in Head Start were on medication related to behavioral problems.[30] But research also repeatedly finds that most young children with serious emotional and behavioral problems are either not identified or misidentified. Head Start programs routinely identify under 1 percent of their children as having emotional and behavioral disabilities, although some of these children are identified as having speech and language disorders.[31]

What percentage of young children are at risk of developing more serious emotional and behavioral problems?

Research in developmental and clinical psychology has consistently identified a set of "risk factors" that increase the odds that children will struggle with later social, emotional, and cognitive difficulties, even as research has identified children in this group who are resilient and "beat the odds." For many who later are identified as having serious emotional and behavioral disabilities, there are both anecdotal and research-based reports that although parents of these children recognize problems in the preschool (or earlier) years, there is a predictable multi-year lag between that recognition and getting the children and families linked to appropriate services, thus losing the potential efficacy of intensive early intervention for these young children.[32] Yet, from a policy perspective, efforts to translate knowledge about the longer-term consequences of multiple risk factors in young children into targeted prevention and early intervention services have been limited.

The research base about early risk factors predicting poor developmental outcomes, including social and emotional outcomes, is solid and compelling. Families with low income, in single-parent households, with low levels of education, or low proficiency in English generally have to cope with greater hardship and more limited access to fewer resources, and their children's odds of doing well are correspondingly, lower. Poverty status, single-parent status, maternal educational levels, and English proficiency are therefore all considered key demographic risk factors. Similarly, parental psychosocial risks such as depression, substance abuse, involvement in domestic violence, homelessness, a history of psychiatric illness, parental abuse as a child, and exposure to repeated major life stresses all increase a child's risk of later emotional and behavioral difficulty. The odds of negative outcomes are further increased by additional risks such as disability, chronic illness, and witnessing violence that obviously overlap with families' demographic risks and income. It is important to note that a great many families facing these risks are able to buffer their children from negative outcomes.[33] But it is equally important that educators and policymakers understand the ways that multiply disadvantaged children face greater odds of early school difficulty. When these additional hurdles go unacknowledged and unaddressed, the risks of early school failure are increased.

For many who later are identified as having serious emotional and behavioral disabilities, there are both anecdotal and research-based reports that although parents of these children recognize problems in the preschool (or earlier) years, there is a predictable multi-year lag between that recognition and getting the children and families linked to appropriate services, thus losing the potential efficacy of intensive early intervention for these young children.

Which risk factors or combinations of risk factors matter most in predicting children's emotional and behavioral competence versus difficulty? A compelling body of research suggests that educators cannot rely on any one marker of disadvantage but rather need as complete a picture as possible of families' and children's lives outside the classroom. Specifically, the more risk factors a child is exposed to, the greater the likelihood

of poor outcomes in general, and behavioral and social problems in particular.[34] Further, research has found that it is not the presence of any one particular risk factor but rather the combination of multiple risks that best predicts the emotional and academic status of children over time.[35]

Less clear, however, is the number of children exposed to multiple risk factors. There is no single source for developing estimates of the numbers of young children who are in families facing these cumulative stressors. The ECLS suggests that 32 percent of kindergartners face one demographic risk (including low levels of maternal educational attainment, single parenthood, welfare assistance, or residence in a non-English speaking home); 16 percent face two or more risks.[36] These risks significantly increase the odds that the health and well-being of young children will be compromised. A smaller study, involving 9,000 first-graders in one large urban school district, found that the experiences of poverty, maltreatment, out-of-home placement, and being parented by a single parent each substantially increased first-graders' chances (by 1.5 to 2 times) of demonstrating behavioral difficulty during the school year.[37] The Family and Child Experiences Survey (FACES), a nationally representative sample of Head Start programs, reported that 17 percent of Head Start's three-to-five-year-old children have witnessed a violent crime or domestic violence, and 3 percent were themselves victims.[38] Exposure to violence and its related trauma can have enormously negative consequences for young children if not addressed.[39]

High rates of parental exposure to serious life stressors have been repeatedly documented in Head Start. In a series of intervention studies in Washington state, just under half of the families participating in the control and treatment groups reported at least four of 14 risk factors (e.g., low levels of educational attainment, parental criminal and substance abuse history, high levels of marital discord and family violence). Some 42 percent of the parents reported moderate to severe levels of depressive symptoms, 20 percent of families reported recent involvement with child protective services, and 16 percent have lived at some point in a homeless shelter with their child.[40] Similar findings have emerged from other early childhood intervention programs such as Early Head Start.[41] A national study of Head Start families' exposure to multiple risks suggests that, from the early 1980s to the early 1990s, there has been a substantial increase in the levels of disadvantage to which Head Start families were exposed. For example, the proportion of Head Start families facing multiple demographic risks has increased by 22 percent and the proportion of Head Start-enrolled children living in poor neighborhoods increased by 35 percent, over that 10-year period.[42]

Similarly, among a sample of mothers transitioning from welfare to work, a recent study found that 37 percent experienced two or three barriers to their own employment that are also known to place young children at risk for poor outcomes, while 27 percent experienced four or more barriers.[43] Two times as many of these women experienced a major depressive disorder as in the general population, while five times as many experienced domestic violence. (See box below.) Maternal depression is a particularly potent risk factor for young children.[44]

PREVALENCE OF PARENTAL RISK FACTORS LIKELY TO NEGATIVELY IMPACT YOUNG CHILDREN'S SOCIAL AND EMOTIONAL DEVELOPMENT

In a sample of over 700 women transitioning from welfare to work:*

- 32 percent had less than a high school education *(compared with 13 percent nationally).*
- 25 percent had a major depressive disorder *(compared with 13 percent nationally).*
- 22 percent had a child with a significant health problem *(compared with 16 percent nationally).*
- 20 percent had their own significant health problem.
- 15 percent had experienced post-traumatic stress disorder *(the same rate as national estimates).*
- 15 percent had experienced an anxiety disorder *(compared with 4.3 percent nationally).*
- 15 percent had experienced domestic violence *(compared with 3 percent nationally).*
- 15 percent had low work experience.
- 6 percent experienced alcohol or drug dependence *(the same rate as national estimates).*

* Danziger, S.; Corcoran, M.; Danziger, S.; Heflin, C.; Kalil, A.; Levine, J.; Rosen, D.; Seefeldt, K.; Siefert, K.; & Tolman, R. O. (2000). Barriers to the employment of welfare recipients. In R. Cherry & W. M. Rogers (Eds.). *Prosperity for all: The economic boom and African Americans.* New York, NY: Russell Sage Foundation.

BEST COPY AVAILABLE

What Research Tells Us About the Role of Teachers and Child Care Providers

Take-Home Messages

The Research Message

- Teachers in preschool classrooms are coping with a substantial number of young children who struggle with emotional and behavioral problems that pose a risk for early school success.
- How teachers interact with young children affects the children's social and emotional outcomes negatively or positively.

The Policy Message

- The first line of defense in promoting school readiness across all developmental domains (including social, emotional, cognitive, and physical) should be to ensure that every child whose parents request it has access to a quality early care and learning experience, marked by classrooms with warm teachers and a predictable, stimulating atmosphere.
- It is critical to provide early childhood teachers with training and access to help in dealing with the numbers of children experiencing or at risk for emotional and behavioral problems, even in high-quality settings, but especially where quality is problematic.

Research Findings

It is useful to consider the role of teachers and child care providers from two perspectives: (1) what they are coping with in their classrooms, and (2) what role they can play in ameliorating or exacerbating the challenges that children may face. With respect to what teachers of young children are coping with, the prevalence and risk data send a very clear message. Teachers in preschool classrooms are dealing with a substantial number of young children who lack important social and emotional competencies and whose behavior is already problematic or who are at risk for developing problematic behaviors. Consider, for example, what the prevalence estimates highlighted above mean for Head Start

Preschool teachers and child care providers report that disruptive behavior is the single greatest challenge that they face and that there seem to be increasing numbers of disruptive and aggressive children in their classes each year.

classrooms. In fiscal year 2000, Head Start served over 850,000 preschool-aged children in 46,225 classrooms.[45] Conservatively, if 10 percent of those children demonstrate elevated levels of behavioral problems, this would translate to 85,000 children. With approximately 18 children in each classroom, this would mean that roughly one to two children per classroom are demonstrating serious, persistent aggressive and oppositional behavior. If rates of problematic behavior among preschool-aged children are as high as 30 percent, then a teacher must manage the aggressive, disruptive, and withdrawn behaviors of five or six of the students in any given classroom. If 25 to 49 percent of the students in a given class have families who are struggling with more than four psychosocial risk factors, then between four and nine children may be coming to their classrooms on any given day wrestling with the impact of these stressors.

In fact, preschool teachers and child care providers report that disruptive behavior is the single greatest challenge that they face and that there seem to be increasing numbers of disruptive and aggressive children in their classes each year.[46] At the same time, early child care providers and teachers are under increasing pressure to ensure that children, in accordance with a national goal, "enter school ready to learn."[47] This has to make the job of teaching and learning particularly hard. These statistics have clear implications for the kinds of support the teachers need as well as the importance of intervention strategies targeted directly to the children and, sometimes, their families.

A significant body of research also highlights the important role that teachers play in the development of social and emotional skills in young children. Recent longitudinal, nonrandomized studies of aspects of child

Low-income children in high-quality child care settings are significantly better off, cognitively and emotionally, than similar children in poor-quality settings.

care quality that can be regulated, such as teacher training, teacher-to-child ratio, and compliance with safety codes, have clearly demonstrated that low-income children in high-quality child care settings are significantly better off, cognitively and emotionally, than similar children in poor-quality settings.[48] Children attending preschool classrooms that are marked by close teacher-student relationships, low levels of problem behaviors, and opportunities for positive social interaction, are more socially competent and fare better academically during the first two years of elementary schooling, than do children from more disruptive classrooms.[49] The quality of child care matters. Higher quality child care (and more center-based experience) predicted better linguistic, cognitive, and preacademic outcomes, and fewer behavioral problems.[50] Research also suggests that teachers can unwittingly perpetuate high levels of misbehavior in their classrooms by either ignoring problematic behaviors or reacting harshly.[51] Even more troubling, a 1994 national survey found that teachers serving predominately low-income children used significantly more harsh, detached, and insensitive behaviors with children than teachers serving middle- and upper-income children.[52]

What Research Tells Us About Classroom-Linked Interventions That Can Help

Take-Home Messages

The Research Message

- Preliminary research findings on the impact of social skills curricula targeted to all preschool children in a classroom are promising but involve very limited samples.
- For preschool-aged children at higher risk, research supports the use of interventions that target both parents and caregivers/teachers (and may also involve social skills curricula targeted to the children). New research combining behavioral strategies with reading and other more academically oriented interventions are also being evaluated.
- On-site mental health consultation is the dominant strategy emerging across the country. Yet research evaluating this strategy is limited. However, early findings from one national demonstration effort are promising, showing consistent cross-site effects of improved parenting and better child outcomes.

The Policy Message

- The urgent need to help young children succeed in school and the numbers of young children who are at risk for early school failure linked to emotional and behavioral difficulties point to the importance of implementing effective interventions earlier rather than later, especially in early care and learning settings. Although still limited, emerging patterns from intervention research can help guide policymakers in developing these earlier intervention strategies.

Research Findings on Classroom-Linked Interventions

Three types of interventions can be implemented for young children from ages three to five:

- universal, prevention-oriented interventions aimed at child care and preschool classrooms as a whole;
- early interventions designed to help children experiencing greater risks for poor emotional and behavioral development; and
- mental health services and related support services beyond the classroom to help the most troubled young children and their families.

This issue brief explores what is known from empirical research addressing the first two types of interventions. It does not address the many emerging preventive and early intervention initiatives that, while not supported by the more rigorous research reported here, may also have important lessons for the field.[53]

Prevention-Oriented Strategies to Strengthen Emotional and Behavioral Competencies

Designing Special Social Skills Curricula

Recently, researchers have designed and tested developmentally appropriate "curricula" to promote young children's decision-making, prosocial behavior, impulse control, and emotional-problem solving. The roots of these efforts lie in strategies tested with older children, largely focused around the implementation of "social skills curricula" where teachers can devote relatively small amounts of class time to instruct children on how to identify and label feelings, how to appropriately communicate with others about emotions (e.g., to use words instead of fists), and how to resolve disputes with peers.[54]

Typically, these social skills curricula weave together activities to promote social skills building as well as cognitive competence. For example, in one approach, researchers adapted an existing primary prevention approach to a younger population using songs and stories about following directions, sharing, and problem-solving.[55] In another program, the aims of the curriculum were to teach young children self-regulation, help them be more aware of and able to communicate about their emotions, promote positive peer relations, and help teachers improve the classroom environment.[56] These interventions were carried out with control and treatment groups, so that any effects of the program could be carefully distinguished from behavioral changes that might occur as a result of the age or amount of time the child spent in Head Start classrooms. Preliminary results from these programs suggest improvements in children's adaptive behavior, social interactions, and attentional behavior. Children who were at risk of developing emotional or behavioral disorders either significantly improved or maintained their previous levels of functioning. In the most fully researched social skills curricula, the authors combined proactive training involving classroom management with a specially designed social skills curricula, viewing effective classroom management as the necessary condition for the successful implementation of a social skills curricula.[57]

The potential gain of social skills programs is that they can be offered "universally" to all children in a given classroom and at a relatively low cost, and that the climate of the classroom may become significantly less chaotic and more conducive to learning.

The potential gain of social skills programs is that they can be offered "universally" to all children in a given classroom and at a relatively low cost, and that the climate of the classroom may become significantly less chaotic and more conducive to learning.[58] In addition, some experts suggest that children with behavior problems can benefit by watching more socially competent children use the skills systematically.[59] For older children, however, research suggests that such approaches, in isolation, have only a modest impact on reducing children's behavioral problems.[60]

Research Findings on Interventions Designed to Help Children Experiencing Greater Risks for Poor Emotional and Behavioral Development

Over the years, there have been many research and demonstration efforts designed to improve outcomes for low-income young children and families.[61] The results of these are promising, but in general, they shed little specific light on how to promote social competence and reduce disruptive behavior, especially in the context of classroom settings. More recently, researchers have begun to address this challenge, testing interventions explicitly designed to promote social competence and reduce disruptive behavior with groups of young children.

Much of this emerging research on the behavioral and emotional problems of young children shares several characteristics. First, the designs of these interventions are premised on the assumption that the children's caregivers as well as the environments that shape children's problematic behavior, such as homes and schools, must be as much the focus of intervention efforts as are the children.[62] This differentiates early childhood mental health interventions from more traditional mental health approaches, making it more akin to a public health model, rather than a clinical or medical model.[63] Second, the designs typically combine several strategies; emotional and social skills learning may be paired with efforts to engage young children in more academic learning; parent-focused strategies may be joined with teacher-focused strategies; preventive interventions may be linked with more intensive strategies targeted to specific children already showing more problematic behaviors.

Combining Child-Focused Academic and Social and Emotional Strategies

Building on the evidence that academic learning and emotional adjustment are intertwined (e.g., behavioral problems interfere with the ability to read, and the inability to read triggers more behavioral problems) a number of researchers are designing programs to foster reading skills and to curtail children's disruptive acting-out behaviors, working both with parents and teachers. For example, a number of interventions are

A recent review of parenting programs (targeted to higher-risk families) concludes that behavioral parent training either for individual parents or groups of parents of young children has had generally positive results in strengthening parenting practices and reducing problems in child behaviors within the home. These findings, however, have not always generalized to child care settings.

in progress where children are assigned to reading interventions as well as behavioral interventions.[64] While outcome data are not yet available on the effectiveness of these interventions, preliminary data suggest that most teachers and parents found participation in the intervention to be positive.

Parent-Training Strategies

Because past research suggests that many of the emotional problems visible in young children appear to be profoundly affected by parenting practices, a number of programs aim to curtail use of inconsistent and harsh parenting as an indirect means of improving children's emotional and behavioral adjustment.[65] A recent and especially thoughtful review of parenting programs (targeted to higher-risk families) concludes that behavioral parent training either for individual parents or groups of parents of young children (from age two) has had generally positive results in strengthening parenting practices and reducing problems in child behaviors within the home.[66] These findings, however, have not always generalized to child care settings.

The most extensively researched effort to achieve positive outcomes in the context of early care and learning settings is a program entitled The Incredible Years: Parent, Teacher, and Child Training Series. Drawing on an empirically validated clinical intervention with parents of preschoolers referred to a mental health clinic because of disruptive behavior, Carolyn Webster-Stratton and her colleagues have developed and con-

ducted sustained research on an intervention that focuses on parents.[67] Targeted to both preschool-aged children and children in the early school years, the program uses videotaped vignettes to foster group discussion among parents about issues related to discipline and positive, supportive child-directed play, and for the older children, supporting school learning at home. To date, there have been six randomized trials of the program by the researchers, as well as replications by others. The program was found to be effective in strengthening the parenting skills of over 200 Head Start mothers, low-income African-American mothers of infants and toddlers in a child care center, and Hispanic families.[68] An additional analysis also found that mothers with special risk factors, such as high levels of depression, reported physical and sexual abuse as children, and high levels of anger were able to engage in the parenting program and to benefit from it at levels comparable to other parents.[69]

There is also some promising research designed particularly to help high-risk parents. Focusing on a low-income population, using a family-strengths-based approach, John Fantuzzo and his colleagues have designed an intervention that aims to increase the enrollment of maltreating families into Head Start programs so that parents and children can benefit from their comprehensive services.[70] The intervention aims to decrease families' social isolation, reduce high psychosocial stress, strengthen parenting skills, and help withdrawn, maltreated children build their social skills using parenting groups and mentoring relationships between maltreating parents and resilient community members (often other parents). It also has a child-focused social skills component. This intervention is impressive in its explicit focus on the multiple ecological risk factors affecting families and in the positive support the program gives to very high-risk parents, using more resilient parents from the same community as mentors. However, no research results have yet been published.

Combining Parent and Teacher Training Strategies

Initially, the Incredible Years program highlighted above focused only on parent training. Researchers added the teacher component after they found that while a universal prevention program offered to all Head Start parents resulted in improvements in parenting interactions with children, especially for children with behaviors in the clinical range, there were no visible changes in the classroom. One recent randomized evaluation of both parent- and teacher-focused components involved 272 Head Start mothers and 61 Head Start teachers from 14 centers. All Head Start teachers received six days of training spread over a six-month period to strengthen their skills in promoting and encouraging positive social and emotional behaviors in the classroom while curtailing problematic and disruptive behavior. Led by family service workers who completed a three-day leadership program, the parent component strengthened parental ability to manage negative behaviors in their children and increased parental involvement in the children's preschool. Those in the control group participated in the regular center-based Head Start program. Pre-and post-assessments and one- and two-year follow-ups included reports by parents and teachers as well as independent observations. Results were positive. (See box.) Especially important is the fact that the intervention seems effective for a multi-ethnic group.[71] Similarly positive (though more preliminary) results have been found with other preschool interventions that include both teachers and parents.[72] Thus, overall, recent research on collaborative approaches to parent- and teacher-training suggests that this type of approach can lead to substantial improve-

RESEARCH FINDINGS FROM THE INCREDIBLE YEARS*

At the end of the intervention:

- intervention mothers had significantly lower scores on negative parenting and significantly higher scores on positive parenting;
- parent-teacher bonding was significantly higher for intervention mothers who attended six or more intervention sessions than for control mothers;
- intervention children, especially the most high-risk, showed significant decreases in conduct problems than the control children;
- intervention children were more engaged in on-task behaviors in the classroom than control children;
- teachers in the intervention group had significantly higher scores on the affirmative classroom management indicators; and,
- the classroom climate in the intervention classrooms was more positive overall.

* Webster-Stratton, C.; Reid, M. J.; & Hammond, M. (2001). Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. *Journal of Clinical Child Psychology*, 30(3), pp. 283–302.

ments in Head Start teachers' positive interactions with their students and with parents.

What can be concluded from this growing number of intervention studies? These studies represent very good news for educators and policymakers concerned with the social, emotional, and academic success of young children. They highlight the positive results of classroom-based programs when they are combined with teacher training and parent components. Larger studies now being carried out with Head Start, kindergarten, and first-grade children, parents, and teachers may offer additional insight into the next steps that policymakers can take to support school readiness.

Early Childhood Mental Health Consultation

Implementing the interventions highlighted above generally involve a clear protocol, specialized training, and varying amounts of research. But there is also new research on a more flexible approach, on-site early childhood mental health consultation. Generally crafted as a partnership between an early care and learning setting (e.g., Head Start, Early Head Start, child care) and a mental health professional, agency, or sometimes set of agencies, on-site mental health consultation in early childhood settings appears to be growing very rapidly.[73] What is particularly appealing about an on-site consultation model is that the consultant can and often does develop a continuum of interventions, from classroom-focused interventions serving all children, to more intensive classroom and sometimes home-linked interventions for more high-risk young children, to referrals for those who need more specialized services. (See box.) The model can be effective for infants and toddlers as well as preschoolers. Further, consultation approaches emphasizing linkages between parents and teachers encourage both sets of adults in a child's life to develop a sense of shared responsibility and support in addressing the child's emotional and behavioral difficulties.[74]

Assessing the impacts of these flexible mental health strategies however, poses research challenges. For example, preliminary findings from a study of a network of consultants from San Francisco suggests that the effectiveness depends upon complex factors such as the fit of the consultant's approach with the philosophy of

EXAMPLES OF WHAT EARLY CHILDHOOD MENTAL HEALTH CONSULTANTS DO*

- Training and problem-solving with teachers.
- Screening and referrals for young children with more serious problems.
- Developing and implementing with teachers classroom-based interventions for specific children.
- Supervising family support workers.
- Providing crisis intervention in the face of community or family disasters.
- Running parent groups and working with families individually.

* Yoshikawa, H. & Knitzer, J. (1997). *Lessons from the field: Head Start mental health strategies to meet changing needs.* New York, NY: National Center for Children in Poverty, Columbia University Mailman School of Public Health.

the center.[75] One important national initiative assessing the impact of integrating behavioral health services into child care, Head Start, and primary health settings (each of which uses its own consultation approach) involves a systematic multi-site demonstration and evaluation. Known as Starting Early Starting Smart (SESS), there are now projects in 14 states and the District of Columbia. The research involved nine of the initial sites—four in primary health care settings, five in early childhood settings. The overall aim of SESS is to see if efforts to integrate behavioral health services in these settings promote four broad goals:

- Increase access to and utilization of family/parenting, mental health, and substance abuse services.
- Promote collaboration at the community level to increase services integration.
- Improve parenting skills and family well-being.
- Strengthen child development.

SESS targets children from birth to age seven, and marks a public/private partnership that involves funding and collaboration between the federal Substance Abuse Mental Health Services Administration and the Casey Family Programs. While site–specific strategies vary, all share a set of common principles, with an especially strong commitment to implementing a strengths-based, family participatory process to achieve the SESS goals.[76] Preliminary findings from the research are promising. (See box.) Individual sites also report

BEST COPY AVAILABLE

PRELIMINARY FINDINGS FROM STARTING EARLY STARTING SMART*

Improved Utilization of Services to Reduce Parenting Barriers

- Significantly more of the SESS families accessed or continued to use parenting services after the initiative began and one-third of the families continued in mental health treatment services.
- SESS participants demonstrated a decline in drug use compared to the comparison group.

Improved Parenting Strategies

- SESS families receiving the intervention report decreased verbal aggression in the home while it increased for those not receiving the intervention.
- SESS families demonstrated improved measures of positive parenting regarding appropriate discipline and positive reinforcement, while comparison families experienced declines.
- Interactions between infants and their mothers were significantly more positive than comparison mothers and infants.

Improved Child Outcomes Linked to School Readiness

- The language ability of SESS-enrolled children improved significantly more than children not enrolled in SESS.
- Teachers report that SESS-enrolled children showed reductions in external and internal behavior problems, while problems increased for comparison children.

* Casey Family Programs and the U.S. Department of Health and Human Services. (2001). *Starting Early Starting Smart: Summary of early findings.* Washington, DC: Casey Family Programs and the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.

policy-relevant findings: for example, families receiving the intervention are more likely to use licensed child care, to be working full time, and to be better able to access basic supports (e.g., food and housing). Preliminary findings from one site suggest more stability in housing among families receiving the intervention.

Other Strategies

The strategies highlighted above reflect and are constrained by interventions that have been examined through a research lens. But developmental research also suggests that other strategies might have significant pay-off. For example, Hirokazu Yoshikawa has argued that research supports four pathways, three of which have been highlighted here: (1) providing intensive family support and high quality early education; (2) developing behavioral interventions to address existing behavior problems in young children; and (3) providing intensive, on-site consultation and staff support to address existing mental health problems.[77] The fourth strategy is far less evident; it is an indirect but potentially powerful strategy: ensuring economic security among low-income families.[78] This is a strategy that certainly could be embedded in the other three for example, by ensuring that consultants or staff working directly with families ensure that they access all the basic benefits for which they are eligible, such as the federal Earned Income Tax Credit, or Medicaid and Child Care Subsidies.

Conclusions and Recommendations

This policy paper makes it clear that although there is still much more to learn about the effectiveness of preschool-aged interventions, the scientific evidence of the need for early intervention is compelling. Further, the intervention research that does exist is beginning to tell a sufficiently coherent story to enable policymakers to respond. Below are recommendations for policymakers and researchers to build on the knowledge base highlighted here.

Policymakers should:

- Invest in and evaluate interventions that improve the quality of early childhood classrooms and that provide teachers with the resources and training they need to maintain emotionally positive and cognitively enriching classrooms.
- Pay special attention to classroom-based strategies to promote social and emotional competence that combine child-focused strategies with strategies targeted to parents, teachers, and other caregivers.
- Consider interventions that simultaneously address cognitive, social, and emotional issues, recognizing the links between social and emotional development and successful academic learning, including early literacy.
- Invest in mental health and child development consultants who can help the children, the families, and the teachers implement evidence-based preventive and early intervention strategies related to social and

emotional competence as well as enhance classroom quality and effective management practices.

- Focus special attention on children and families experiencing cumulative and multiple stressors.
- Invest at the state and community levels in strategies to ensure the timely dissemination of "research to practice" knowledge about how to promote social and emotional resilience in young children.

Researchers should:

- Design research to fill in gaps in the understanding of how quality child care and early educational practices affect the social and emotional development of young children.
- Pay more attention to issues of "treatment fidelity"—ask if the intervention was carried out as planned, and how this affects the results.
- Conduct multi-site investigations of promising approaches that now primarily involve relatively small samples in one or two sites.
- Conduct research on the cost-benefit ratio and tradeoffs of investing in different types of interventions.
- Convene networks of researchers in early childhood mental health to promote the use of shared measures and methodologies to maximize the learning from future research.

This policy paper is intended to serve as a call to action for researchers and policymakers. The urgency of the need, the growing knowledge base, coupled with the stake society has in addressing the social and emotional development of young children in a smart way, compels greater attention to this critical domain of child development in the context of school readiness.

Endnotes

1. National Research Council and Institute of Medicine, Board on Children, Youth, and Families, Commission on Behavioral and Social Sciences and Education; Shonkoff, J. P. & Phillips, D. (Eds.). (2001). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.

2. Alexander, K. & Entwistle, D. (1998). *Achievement in the first two years of school: Patterns and processes* (Monographs of the Society for Research in Child Development, 53(2), Serial No. 218). Chicago, IL: University of Chicago Press.

Entwistle, D. & Alexander, K. (1999). Early schooling and stratification. In R. C. Pianta & M. J. Cox, (Eds.). The transition to kindergarten. Baltimore, MD: Paul H. Brookes, pp. 13–38.

Speece, D. & Cooper, D. (1990). Ontogeny of school failure: Classification of first grade children. *American Educational Research Journal*, 27, pp. 119–140.

3. See, for example, Kaufmann, R. & Perry, D. (2001). Promoting social-emotional development in young children: Promising approaches at the national, state, and community levels. St. Louis, MO: Ewing Marion Kaufmann Foundation. Paper presented at the Kaufmann Early Education Exchange in Social and Emotional Development and School Readiness, November 12, 2001.

Knitzer, J. (2000). *Using mental health strategies to move the early childhood agenda and promote school readiness* (Promoting the Emotional Well-being of Children and Families Policy Reprint). New York, NY: National Center for Children in Poverty, Columbia University Mailman School of Public Health.

4. Children's social and emotional problems emerge as early as the second year of life. See Briggs-McGowan, M. J.; Carter, A. S.; Suban, E. M.; & Horwitz, S. M. (2001). Prevalence of social-emotional and behavioral problems in a community sample of 1- and 2-year-old children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40, pp. 811–819.

Risk factors are visible even earlier. See Thompson, R. (2001). The roots of social and emotional development. St. Louis, MO: Ewing Marion Kaufmann Foundation. Paper presented at the Kaufmann Early Education Exchange in Social and Emotional Development and School Readiness, November 12, 2001.

For more general discussion about the earliest years see endnote 1 and Larner, M. B. (Ed.). (2001). Caring for infants and toddlers. *The Future of Children*, 11(1), pp. 7–157.

5. See endnote 1 and Peth-Pierce, R. (2001). A good beginning: Sending America's children to school with the social and emotional competence they need to succeed. Monograph based on two papers commissioned by the Child Mental Health Foundations and Agencies Network (FAN). Chapel Hill, NC: University of North Carolina.

6. Jimerson, S.; Egeland, B.; & Teo, A. (1999). A longitudinal study of achievement trajectories: Factors associated with change. *Journal of Educational Psychology*, 91(1), pp. 116–126.

Masten, A. S. & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist*, 53(2), pp. 205–220.

7. Ladd, G. W. & Burgess, K. (1999). Charting the relationship trajectories of aggressive, withdrawn, and aggressive/withdrawn children during early grade school. *Child Development*, 70(4), pp. 910–929.

Ladd, G. W.; Kochenderfer, B. J.; & Coleman, C. (1997). Classroom peer acceptance. Friendship and victimization: Distinct relational systems that contribute uniquely to children's school adjustment. Child Development, 68(6), pp. 1181–1197.

McClelland, M. M.; Morrison, F. J.; & Holmes, D. L. (2000). Children at risk for early academic problems: The role of learning-related social skills. *Early Childhood Research Quarterly*, 15(3), pp. 307–320.

8. Agostin, T. M. & Bain, S. (1997). Retention in kindergarten. *Psychology in the Schools*, 34(3), pp. 219–228.

9. Kupersmidt, J. B. & Coie, J. D. (1990). Preadolescent peer status, aggression, and school adjustment as predictors of externalizing problems in adolescence. *Child Development*, 61(5), pp. 1350–1362.

Shores, R. E. & Wehby, J. H. (1999). Analyzing the classroom social behavior of students with EBD. *Journal of Emotional and Behavioral Disorders*, 7(4), pp. 194–199.

10. Arnold, D. H.; Ortiz, C.; Curry, J. C.; Stowe, R. M.; Goldstein, N. E.; Fisher, P. H.; Zeljoja, A.; & Yershova, K. (1999). Promoting academic success and preventing disruptive behavior disorders through community partnership. *Journal of Community Psychology*, 27(5), pp. 589–598.

McEvoy, A. & Welker, R. (2000). Antisocial behavior, academic failure, and school climate: A critical review. *Journal of Emotional and Behavioral Disorders*, 8(3), pp.130–140.

Also see Shores & Wehby in endnote 8.

11. Espinosa, L. M. & Laffey, J. M. (Unpublished manuscript). Urban primary teacher perceptions and student performance: Congruent or divergent? Columbia, MO: University of Missouri, Columbia.

Laffey, J. M.; Espinosa, L.; Moore, J.; & Lodree, A. (Unpublished manuscript). Supporting learning and behavior of young children: Computers in urban education. Columbus, MO. Center for Technology Innovation in Education, University of Missouri, Columbia.

12. Ladd, G. W.; Birch, S. H.; & Buhs, E. S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development*, 70(6), pp. 1373–1400.

13. Birch, S. H. & Ladd, G. W. (1997). The teacher-child relationship and children's early school adjustment. *Journal of School Psychology*, 35(1), pp. 61–79.

Murray, C. & Greenberg, M. T. (2000). Children's relationships with teachers and bonds with school: An investigation of pat-

terns and correlates in middle childhood. *Journal of School Psychology*, 38(5), pp. 423–445.

14. Arnold, D. H. (1997). Co-occurrence of externalizing behavior problems and emergent academic difficulties in high-risk boys: A preliminary evaluation of patterns and mechanisms. *Applied Developmental Psychology*, 18, pp. 317–330.

Hinshaw, S. P. (1992). Externalizing behavior problems and academic underachievement in childhood and adolescence: Causal relationships and underlying mechanisms. *Psychological Bulletin*, 111(1) pp. 127–155.

McClelland, M. M.; Morrison, F. J.; & Holmes, D. L. (2000). Children at risk for early academic problems: The role of learning-related social skills. *Early Childhood Research Quarterly*, 15(3), pp. 307–329.

15. Lane, K. L.; O'Shaunessy, T. E.; Lambros, K. M.; Grescham, F. M. & Beebe-Frankenberger, M. E. (2001). The efficacy of phonological awareness training with first-grade students who have behavior problems. *Journal of Emotional and Behavioral Disorders*, 9(4), pp. 219–234.

16. Kaiser, A. P.; Hancock, T. B.; Cai, X.; Foster, E. M.; & Hester, P. (2000). Parent-reported behavior problems and language delays in boys and girls enrolled in Head Start classrooms. *Behavior Disorders*, 26(1), pp. 26–41.

See also Espinosa, L. M. & McCauthren, R. B. (2001). The connections between social-emotional development and early literacy. St. Louis, MO: Ewing Marion Kaufmann Foundation. Paper presented at the Kaufmann Early Education Exchange on Social and Emotional Development and School Readiness, November 12, 2001.

17. Zill, N. & West, J. (2001). *Entering kindergarten: Findings from the Condition of Education, 2000* (Publication No. NCES2001-035). Washington, DC: U.S. Department of Education. See: <http://www.census.gov/press-release/cb97-80html>.

See also Love, J. (2000). The class of 2001 embarks: Perspectives on America's kindergartners. *Education Statistics Quarterly*, 2(1). See: <http://nces.ed.gov/pubs2000/qrtlyspring/2feat/q2-3.html>.

18. Stipek, D. J. & Ryan, R. H. (1997). Economically disadvantaged preschoolers: Ready to learn but further to go. *Developmental Psychology*, 33(4), pp. 711–723.

West, J. & Denton, K. L. (2001). Vulnerable children and at-risk families: What schools offer kindergartners and their families. Paper presented at the Twentieth Biennial Meeting of the Society for Research in Child Development, Minneapolis, Minnesota.

19. Pigott, R. L. & Cowen, E. L. (2000). Teacher race, child race, racial congruence, and teacher ratings of children's school adjustment. *Journal of School Psychology*, 38(2), pp. 177–196.

Rimm-Kaufman, S. E.; Pianta, R. C.; & Cox, M. J. (2000). Teachers' judgements of problems in the transition to kindergarten. *Early Childhood Research Quarterly*, 15(2), pp. 147–166.

20. Serna and her colleagues compared assessments based on different measures of symptoms and functional impairment in a sample of 285 Head Start children from diverse ethnic backgrounds. Identification rates for children using different combinations of assessment tools varied from 1 percent to close to 28 percent. Four of the combinations reflected considerable evidence of gender and ethnic bias. See Serna, L.; Nielsen, E.; Mattern, N.; & Forness, S. (In press). Measures of symptoms and functional impairment on identification, gender, or ethnic overepresentation and risk for emotional and behavioral disorders in preschool children. *Education and Treatment of Children*.

21. Serna, L.; Nielsen, E.; Mattern, N.; & Forness, S. (In press). Use of different measures to identify preschoolers at-risk for emotional behavioral disorders: Impact on gender and ethnicity. In Srup R. Mathur, (Ed.). Special Issue, *Education and Treatment of Children*, 26(3).

See also Garcia Coll, C. T.; Meyer, E. C.; & Brillon, L. (1995). Ethnic and minority parenting. In M. H. Bornstein, (Ed.). *Handbook of parenting, Vol. 2: Biology and ecology of parenting*. Mahwah, NJ: Lawrence Erlbaum Associates.

Barbarin, O. A. (2001). Culture and ethnicity in social, emotional, and academic development. St Louis, MO: Ewing Marion Kaufmann Foundation. Paper presented at the Kauffman Early Education Exchange on Social and Emotional Development and School Readiness. November12, 2001.

22. West, J.; Denton, K.; & Reaney, L. M. (2001). *The kindergarten year: Findings from the Early Childhood Longitudinal Study, Kindergarten class of 1998–1999* (Publication No. NCES2001-023). Washington DC: U.S. Department of Education, National Center for Education Statistics.

Other studies also report that preschool children from low SES families exhibit more externalizing behaviors in kindergarten than do their higher SES counterparts. See Dodge, K. A.; Pettit, G. S.; & Bates, J. E. (1994). Socialization mediators of the relations between socioeconomic status and child conduct problems. *Child Development*, 65(2), pp. 649–660.

23. Kupersmidt, J. B.; Bryant, D.; & Willoughby, M. (2000). Prevalence of aggressive behaviors among preschoolers in Head Start and community child care programs. *Behavioral Disorders*, 26(1), pp. 42–52.

Willoughby, M.; Kupersmidt, J.; & Bryant, D. (2001). Overt and covert dimensions of antisocial behavior in early childhood. *Journal of Abnormal Child Psychology*, 29(3), pp. 177–187.

24. Goldstein, N. E.; Arnold, D. H.; Rosenberg, J. L.; Stowe, R. M.; & Ortiz, C. (2001). Contagion of aggression in day care classrooms as a function of peer and teacher response. *Journal of Educational Psychology*, 93(4), pp. 708–719.

25. Gross, D.; Sambrook, A.; & Fogg, L. (1999). Behavior problems among young children in low-income, urban day care centers. *Research in Nursing and Health*, 22(1), pp. 15–25.

26. Lopez, M. L.; Tarullo, L. B.; Forness, S. R.; & Boyce, C. A. (2000). Early identification and intervention: Head Start's response to mental health challenges. *Early Education and Development*, 11(3), pp. 265–282

27. Campbell, S. (1990). Behavior problems in preschool children. New York, NY: Guilford Press.

Lane, K. L.; Beebe-Frankenberger, M. E.; Lambros, K. M.; & Pierson, M. (2001). Designing effective interventions for children at-risk for antisocial behavior: An integrated model of components necessary for making valid inferences. *Psychology in the Schools*, 38(4), pp. 365–379.

Reid, J. B. (1993). Prevention of conduct disorder before and after school entry: Relating interventions to developmental findings. *Development and Psychopathology*, 5, pp. 243–262.

Webster-Stratton, C. (1998). Preventing conduct problems in Head Start children: Strengthening parenting competencies. *Journal of Consulting and Clinical Psychology*, 66(5), pp. 715–730.

28. See Kupersmidt, Bryant, & Willoughby, in endnote 23.

See also Cluett, S. E.; Forness, S. R.; Ramey, S. L.; & Ramey, C. T. (1998). Consequences of differential diagnostic criteria on identification rates of children with emotional or behavioral disorders. *Journal of Emotional and Behavioral Disorders*, 6(3), pp. 130–140,

29. Sinclair, E.; Del'Homme, M.; & Gonzalez, M. (1993). Systematic screening for preschool behavioral disorders. *Behavioral Disorders*, 18(3), pp. 177–188.

30. Redden, S. C.; Forness, S. R.; Ramey, S. L.; Ramey, C. T.; & Brezausek, C. M. (In press). *Mental health and special education outcomes of Head Start children followed into elementary school*. Submitted to National Head Start Association Dialog.

31. Fantuzzo, J. W.; Stoltzfus, J.; Lutz, M. N.; Hamlet, H.; Balraj, V.; & Turner, C. (1999). An evaluation of the special needs referral process for low-income preschool children with emotional and behavioral problems. *Early Childhood Research Quarterly*, 14(4), pp. 465–482.

Yoshikawa, H. & Knitzer, J. (1997) *Lessons from the field: Head Start mental health strategies to meet changing needs*. New York, NY: National Center for Children in Poverty, Columbia University Mailman School of Public Health and the American Orthopsychiatric Association.

32. In one study, appropriate referral did not happen until the fifth grade; other studies have found similar time lags. See Forness, S.; Serna, L.; Nielsen, E.; Lambros, K.; Hale, M. J.; & Kavali, K. (2000). A model for early detection and primary prevention of emotional or behavioral disorders. *Education and Treatment of Children*, 23(3), pp. 325–345.

33. For more extensive discussion of factors predicting resilience among children facing multiple chronically stressful conditions associated with poverty, see Magnus, K. B.; Cowen, E. L.; Wyman, P. A.; Agen, D. B.; & Work, W. C. (1999). Correlates of resilient outcomes among highly stressed African-American and white urban children. *Journal of Community Psychology*, 27(4), pp. 473–488.

34. Ackerman, B. P.; Izard, C. E.; Schoff, K.; Youngstrom, E. A.; & Kogos, J. (2000). Contextual risk, caregiver emotionality, and the problem behaviors of 6- and 7-year-old children from economically disadvantaged families. *Child Development*, 70(6), pp. 236–248.

35. Burchinal, M. R.; Roberts, J. E.; Hooper, S.; & Zeisel, S. A. (2000). Cumulative risk and early cognitive development: A comparison of statistical risk models. *Developmental Psychology*, 36(6), pp. 793–807.

36. See Zill & West in endnote 17.

37. Weiss, A. D. & Fantuzzo, J. W. (2000). Multivariate impact of health and caretaking risk factors on the school adjustment of first graders. *Journal of Community Psychology*, 29(2), pp.141–160.

38. Zill, N.; Reznick, G.; & McKey, R. H. (1999). *What children know and can do at the end of Head Start and what it tells us about the program's performance*. See: <http://www2.acf.dhhs.gov/programs/hsb/hsreac/faces/albqfinl2.pdf>.

39. Webster-Stratton, C. & Taylor, T. (2001). Nipping early risk factors in the bud: Preventing substance abuse, delinquency, and violence in adolescence through interventions targeted at young children (0–8 years). *Prevention Science*, 2(3), pp. 165–192.

40. See Webster-Stratton, C. in endnote 27.

41. U.S. Department of Health and Human Services, Administration on Children, Youth, and Families. (1999). *Leading the way: Characteristics and early experiences of selected Early Head Start programs*. Washington, DC: U.S. Department of Health and Human Services, Administration on Children, Youth, and Families.

42. These risks included poverty, welfare receipt, single female-headed household, and parental joblessness. See Foster, E. M. (Forthcoming). Trends in multiple and overlapping disadvantages among Head Start enrollees. *Youth and Family Services Review*.

43. Danziger, S.; Corcoran, M.; Heflin, C.; Kalil, A.; Levine, J.; Rosen, D.; Seefldlt, K.; Siefert, K.; & Toman, R. O. (2000). Barriers to the employment of welfare recipients. In R. Cherry & W. M. Rogers, (Eds.). Prosperity for all: *The economic boom and African Americans*. New York, NY: Russell Sage Foundation.

44. NICHD Early Child Care Research Network. (1999). Chronicity of maternal depressive symptoms, maternal sensitivity, and child functioning at 36 months. *Developmental Psychology*, 35(5), pp. 1297–1310.

45. Greenberg, M. T.; Domitrovich, C.; & Bumbarger, B. (2001). Effectiveness of prevention programs for mental disorders in school-age children. In Research and Training Center for Children's Mental Health. *A System of Care for Children's Mental Health: Expanding the Research Base—13th annual conference proceedings*. Tampa, FL: Research and Training Center for Children's Mental Health, pp. 177–185. See: <http://www2.acf.dhhs.gov/programs/hsb/about/fact2001.htm>.

46. Arnold, D. H.; McWilliams, L.; & Arnold, E. H. (1998). Teacher discipline and child misbehavior in day care: Untangling causality with correlational data. *Developmental Psychology*, 34(2), pp. 276–287.

See also Kupersmidt, Bryant, & Willoughby in endnote 23 and Yoshikawa & Knitzer in endnote 31.

47. Goals 2000: Educate America Act, P.L. 103-227, enacted March, 1994.

48. Burchinal, M. R.; Peisner-Feinberg, E. S.; Bryant, D. M.; & Clifford, R. M. (2000). Children's social and cognitive development and child care quality: Testing for differential associations related to poverty, gender, or ethnicity. *Applied Developmental Science*, 4(3), pp. 149–165.

Peisner-Feinberg, E. S.; Burchinal, M. R.; Clifford, R. M.; Culkin, M. L.; Howes, C.; Kagan, S. L.; Yazejian, N.; Byler, P.; Rustici, J.; & Zelazo, J. (1999). *The children of the cost, quality, and outcomes study go to school*. Chapel Hill, NC: Frank Porter Graham Child Development Center, University of North Carolina at Chapel Hill.

49. Howes, C.; Phillipsen, L. C.; & Peisner-Feinberg, E. (2000). The consistency of perceived teacher-child relationships between preschool and kindergarten. *Journal of School Psychology*, 38(2), pp. 113–132.

See also Peisner-Feinberg, Burchinal, Clifford, *et al.* in endnote 48.

50. NICHD Early Child Care Research Network. (2002). Early care and children's development prior to school entry: Results from the NICHD study of early child care. *American Educational Research Journal*, 39, pp. 133–164. This careful analysis is based on observations of quality at ages 6, 15, 24, 36, and 54 months, as well as information about the amounts and types of care. Effect sizes were determined to be similar to those for the impacts of income and parenting.

51. Arnold, McWilliams, & Arnold in endnote 46.

52. Phillips, D.; Voran, M.; Kisker, E.; Howes, C.; & Whitebrook, M. (1994). Child care for children in poverty: Opportunity or inequality? *Child Development*, 65(2), pp. 472–492.

53. Cohen, E. & Kaufmann, R. (2000). Early childhood mental health consultation. Washington, DC: U.S. Department of Health and Human Services, Center for Mental Health Services, Substance Abuse and Mental Health Services Administration (SAMHSA).

Knitzer, J. (2000). Early childhood mental health services through a policy and systems development perspective. In J. P. Shonkoff & S. J. Meisels, (Eds.). *Handbook of early childhood intervention, 2nd ed.* New York, NY: Cambridge University Press.

Simpson, J. S.; Jivanjee, P.; Kroloff, N.; Doerfler, A.; & Garcia, M. (2001). *Promising practices in early childhood mental health* (Systems of Care: Promising Practices in Children's Mental Health 2001 Series, Vol. 3). Washington, DC: Center for Effective Collaboration and Practice, American Institute for Research.

54. Conduct Problem's Prevention Research Group. (1999). Initial impact of the Fast Track Prevention Trial for Conduct Problems II: Classroom effects. *Journal of Consulting and Clinical Psychology*, 67, pp. 648–657.

Frey, K.; Hirschstein, M. K.; & Guzzo, B. A. (2000). Second Step: Preventing aggression by promoting social competence. *Journal of Emotional and Behavioral Disorders*, 8(2), pp. 102–113.

Quinn, M. M.; Kavale, K. A.; Mathur, S. R.; Rutherford, R. B.; & Forness, S. R. (1999). A meta-analysis of social skills interventions for students with emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders*, 7(1), pp. 54–64

55. Serna, L.; Nielsen, E.; Lambros, K.; & Forness, S. (2000). Primary prevention with children at risk for emotional or behavioral disorders: Data on a universal intervention for Head Start classrooms. *Behavioral Disorders*, 26(1), pp. 70–84.

56. Domitrovich, C. & Greenberg, M. (2001). Promoting social and emotional competence in Head Start children and their families. Overheads from presentation to the National Head Start Training and Technical Assistance Meeting, December 2001.

57. Personal communication with Dr. Carolyn Webster-Stratton, April 16, 2002.

58. See Conduct Problem's Prevention Research Group in endnote 54.

See also Webster-Stratton & Taylor in endnote 39.

59. See Frey, Hirschstein, & Guzzo in endnote 54.

60. See Quinn, Kavale, Mathur, *et al.* in endnote 54.

See also McMahon, S. D.; Washburn, J.; Felix, E. D.; Yakin, J.; & Childrey, G. (2000). Violence prevention: Program effects on urban preschool and kindergarten children. *Applied and Preventive Psychology*, 9, pp. 271–281.

61. Reynolds, A. J.; Temple, J. A.; Robertson, D. L.; & Mann, E. A. (2001). Long-term effects of an early childhood intervention on education al achievement and juvenile arrest: A 15-year follow-up. *Journal of the American Medical Association*, 285(18), pp. 2339–2346.

Ramey, C. T. & Ramey, S. L. (1999). Beginning school for children at risk. In R. C. Pianta and M. J. Cox, (Eds.). The transition to kindergarten. Baltimore, MD: Paul H. Brookes, pp. 217–251.

62. See McEvoy & Welker in endnote 10.

See also Knitzer in endnote 53.

63. Greenberg, M. T.; Domitrovich, C.; & Bumbarger, B. (2001). The prevention of mental disorders in school-aged children: Current state of the field. *Prevention and Treatment*, 4, pp. 1–63.

64. See Arnold, Ortiz, Curry, *et al.* in endnote 10.

Kuperschmidt, J. & Bryant, D. (2001). The effectiveness of a classroom and parenting intervention program for aggressive preschoolers in Head Start. Paper presented to Society for Research in Child Development, Minneapolis, MN.

65. Patterson, G. R.; Capaldi, D.; & Bank, L. (1991). An early starter model of predicting delinquency. In D. J. Pepler & K. H. Rubin, (Eds.). *The development and treatment of childhood aggression*. Newbury Park, CA: Sage, pp. 52–82.

See Reid in endnote 27.

66. See Webster-Stratton & Taylor in endnote 39.

67. See Webster-Stratton in endnote 27

68. Reid, M. J. & Webster-Stratton, C. (2001). Parent training with low-income, minority parents: A comparison of treatment response in African-American, Asian-American, Caucasian, and Hispanic mothers. *Prevention Science*, 2(4), pp. 209–227.

69. Baydar, N.; Reid, M. J.; & Webster-Stratton, C. (Unpublished manuscript). Who benefits from school-based preventive parent training programs? The role of mother mental health factors and program engagement.

70. Fantuzzo, J. W.; Stevenson, H. C.; Weiss, A D.; & Hampton, V. R. (1997). A partnership-directed school-based intervention for child physical abuse and neglect: Beyond mandatory reporting. *School Psychology Review*, 26(2), pp. 298–313.

71. Webster-Stratton, C.; Reid, M.; & Hammond, M. (2001). Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. *Journal of Clinical Child Psychology*, 30(3), pp. 283–302.

72. See Kupersmidt & Bryant in endnote 64.

73. See Yoshikawa & Knitzer in endnote 31.

See Cohen & Kaufmann in endnote 53.

Knitzer, J. (2001). *Building services and systems to support the healthy emotional development of young children* (Promoting the Emotional Well-being of Children and Families Policy Paper No. 1). New York, NY: National Center for Children in Poverty, Columbia University Mailman School of Public Health. See: <http://cpmcnet.columbia.edu/dept/nccp/ProEmoPP1.html>.

74. Sheridan, S. M.; Eagle, J. W.; Cowan, R. J.; & Mickelson, W. (2001). The effects of conjoint behavioral consultation: Results of a 4-year investigation. *Journal of School Psychology*, 39(5), pp. 361–385.

75. Tymminsky, R. (2001). A final report of an evaluation of mental health consultation in child care centers: San Francisco's High Quality Child Care Initiative (1999–2001). Unpublished. This research found that the social skills lag in young children. At baseline, children served manifested a 20-month delay on measures of social skills; after the intervention, this was reduced to nine months. (There was no control group).

76. Hanson, L.; Deere, D.; Lee, C.; Lewin, A.; & Seval, C. (2001). *Key principles in providing integrated behavioral health services for young children and their families: The Starting Early Starting Smart Experience*. Washington, DC: Casey Family Programs and the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA).

77. Yoshikawa, H. (2001). *Promoting mental health in early care and education: Current research and implications for practice*. Presentation to the New York University Center for Child and Family Policy, December 2001. New York, NY: New York University School of Education.

78. Morris, P. (2002). The effects of welfare reform policies on children. *Social Policy Report*, 16(1), pp. 4–18.

See also: Knitzer, J.; Yoshikawa, H.; Cauthen, N. K.; & Aber, J. L. (2000). Welfare reform, family support, and child development: Perspectives from policy analysis and developmental psychopathology. *Development and Psychopathology*, 12(4), pp. 619–632.

Duncan, G. & Brooks-Gunn, J. (2001). Family poverty, welfare reform, and child development. *Child Development*, 71(1), pp. 188–196.

NATIONAL CENTER FOR CHILDREN IN POVERTY

www.nccp.org

The NATIONAL CENTER FOR CHILDREN IN POVERTY (NCCP) was established in 1989 at the School of Public Health, Columbia University, with core support from the Ford Foundation and the Carnegie Corporation of New York. The Center's mission is to identify and promote strategies that prevent child poverty in the United States and that improve the lives of low-income children and their families.

NCCP:

- Places a special emphasis on preventing or alleviating poverty among children under age six because young child poverty poses particularly serious risks to children's healthy growth and development.
- Conducts and synthesizes relevant research to meet the needs of key audiences that work on issues affecting low-income families.
- Uses sound research to identify and promote wise investments in low-income families that have important long-term benefits for children, families, their communities, their states, and the nation as a whole.
- Employs a multi-disciplinary approach to build bridges between academic research, field-based knowledge of the experiences of low-income families raising children, attitudinal research, and the development of public and private sector initiatives for low-income families with children.
- Works to accurately, effectively, clearly, and broadly communicate its research in compelling ways.
- Emphasizes providing useful information to state and local policymakers as they establish goals and objectives and allocate resources for efforts to prevent or alleviate child poverty.
- Helps key stakeholders and the general public understand and effectively respond to the constantly changing face of child poverty. NCCP does this by assessing and tracking: the definition and measurement of child poverty; the impact of child poverty on various sub-populations; the effects of particular policies on low-income families and children; and public attitudes and awareness regarding child poverty, low-income families, and related issues.

000000 2

NATIONAL CENTER FOR CHILDREN IN POVERTY
MAILMAN SCHOOL OF PUBLIC HEALTH
COLUMBIA UNIVERSITY
154 Haven Avenue, New York, NY 10032
TEL: 212-304-7100 • FAX: 212-544-4200
www.nccp.org

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

[X] This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

[ ] This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

000006
3